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HYDROLOGICAL MEMORANDA No. 15

Rainfall over the catchment area of the Severn River Board, 1916-1950.

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HYDROLOGICAL MEMORANDA NO. 15

Rainfall over the areas of the Severn River Board 1916-1950

1. Rainfall, 1916-1950:

1.1. Introduction. The estimation of standard-period averages for the months or for the year, is carried out in three stages; the selection of sound, homogeneous records complete for the 35 years, 1916-1950, which provide arithmetic means of monthly and annual rainfall, the basic values for all other work; the estimation of standard-period, annual averages for short-period stations; the estimation of standard-period, monthly averages for stations in the second group, where these are needed for special purposes.

A detailed account of the methods developed and used in the Meteorological Office (M.O.3) to estimate standard-period averages from short-period records, is given in Hydrological Memoranda No. 5.

It is possible to process the data in a number of ways but the maps and tables are presented here in the simplest, most precise forms in order to be of use to a wide range of enquirers.

1.2. The Primary Survey, for Great Britain and Northern Ireland, of stations with complete records during 1916-1950, included some cases where the site had been changed to one with a better exposure and observations from both sites had been recorded for a few years. Attempts were made to amend the earlier readings by comparison of the data during a period of overlap, in order to have a set of values from 1916 to the date of the change, which would be representative of the later, and better, record. But since the earlier exposures were usually unsatisfactory (being over-exposed or over-sheltered), the results were mostly erratic and the amended sets of values were not homogeneous. In a few cases, small breaks in a long record were completed by using estimated values, based on a nearby station, with or without the use of a modifying factor.

Of the many records examined, monthly and annual averages were accepted for 44 stations. The accepted values (in inches), together with the proportions (per cent) of each monthly average to the annual average, are given in Table I together with the altitude and the National Grid reference for each station. Most of these averages were included in H.M.S.O. publication, M.O.635, "Averages of Rainfall for Great Britain and Northern Ireland, 1916-1950", some were omitted because other stations were so near.

The percentage proportion of monthly averages to the annual averages for the long-period stations were used to draw a series of twelve monthly maps from which it is possible to estimate the percentage of average annual rainfall, for any place, for each month of the year. These maps are shown as Figure 1. Values estimated for a few points between the isopercental lines have been added to give a clearer indication of the variations from place to place. The points chosen are not necessarily the same for each map.

1.3. The Secondary Survey of short-period stations was undertaken next, using records up to the time of the survey, usually into the late 1950's. Long-period stations, whose averages had been rejected from the Primary Survey because the record was not homogeneous, were examined again and averages were estimated for the later (and usually improved) part of the series of observations. Averages based on data for less than 5 years were not usually accepted for publication. A list of the accepted averages, for the short-period stations, is given in Table II together with the altitude and National Grid reference for each. The stations are listed in an order based on natural drainage areas which will be used for the first time in British Rainfall, 1961.

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These averages, together with the long-period averages listed in Table I, were plotted on Ordnance Survey Maps (scale 4 miles to the inch), and used to draw the lines of average annual rainfall, 1916-1950. The map is shown as Figure 2. The Secondary Survey is frequently revised for special areas using the most up-to-date observations for relatively new stations and the map is subject to revision from time to time. The redrawing of the isohyets usually results in greater detail and perhaps a clearer definition of a wet area as more and more observations become available from improved River Board networks of rain-gauges. Drastic changes are not expected. In Tables I, II and III, with a few exceptions, the averages quoted are for records still being maintained in 1963.

1.4. Monthly Averages for a further group of stations were next estimated for use in the Monthly Weather Report and for enquiries. For this purpose some stations were chosen from those listed in Table II to supplement those listed in Table I. To find the monthly averages, the monthly proportions (per cent of annual average) were chosen from the equipercental maps (see Fig. 1) so that the total for the twelve months was 100. These monthly percentages were then used to apportion the annual average (in inches) amongst the months. The results are given in Table III.

1.5. Daily Rainfall, 1916-1950. Two of the initial records which were accepted for the Primary Survey (1.2.) were analysed further. To these we added two more records, Grantsfield, just inside the Wye area and Birmingham just within the Trent boundary. These records had regular daily entries, for the 24-hour period 0900 to 0900, for each of the 35 years, 1916-1950. Table IVa gives for each of the stations the 35-year totals for each day of the year (in inches for each of the stations). Table IVb gives 1/35 of all possible totals from .17 in. to 24.67 in., thus providing a reduction table for the values in IVa to give average daily falls from "trace" to .70 in. For 29 February the reduction factor is, of course, 1/9.

These daily averages can be re-grouped as 5-day means, 7-day means, consecutive or sliding means or in whatever form suits a specific requirement.

2. Frequencies of Daily Rainfall, 1916-1950. The same set of daily values used for Table IVa were re-grouped to give frequency tables with intervals of .01 inch. These have been re-arranged in Table V, to give accumulated frequencies with intervals of .10 in. up to 2.50 in. and a wider grouping above this.

3. Extremes of Rainfall. The records for the 35-year period, 1916-1950, for the stations used in Tables IV and V were also used to find maximum and minimum values for the year and for each month and also maximum daily values for each month. These maxima and minima are given in Table VI and Table VII. Additional extremes are given in these tables to cover the 50-year period, 1911-1960.

Appendix I.

Intense Falls. Falls of 2 hours or less, which have been recorded in British Rainfall and rank as "noteworthy", "remarkable" or "very rare", are listed in Appendix I.

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TABLE I. Monthly and Annual Averages of Rainfall, 1916–1950, (in inches)
Severn River Board Area

County	Station	Alt. ft.	N.G.R.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Year	
Glouces.	Thornbury Park	70	ST(31)634908	3.25	2.28	2.13	2.19	2.38	1.95	3.03	3.16	2.88	3.43	3.19	3.13	33.00	Inch
				9.8	6.9	6.5	6.6	7.2	5.9	9.2	9.6	8.7	10.4	9.7	9.5	100.0	%
Mtgomery.	Penarth Weir	321	SO(32)139926	3.93	2.84	2.37	2.48	2.66	2.23	2.83	2.91	2.97	3.94	4.05	3.73	36.94	Inch
				10.6	7.7	6.4	6.7	7.2	6.0	7.7	7.9	8.0	10.7	11.0	10.1	100.0	%
"	Brithdir Hall	350	SJ(33)194026	3.30	2.55	2.14	2.11	2.43	2.02	2.69	2.88	2.62	3.31	3.43	3.16	32.64	Inch
				10.1	7.8	6.6	6.5	7.5	6.2	8.2	8.8	8.0	10.1	10.5	9.7	100.0	%
"	Fron Llwyd	500	SJ(33)215077	3.59	2.58	2.17	2.26	2.66	2.26	3.02	3.08	2.74	3.61	3.60	3.27	34.84	Inch
				10.3	7.4	6.2	6.5	7.6	6.5	8.7	8.8	7.9	10.4	10.3	9.4	100.0	%
"	Welshpool, County School	254	SJ(33)228071	3.19	2.35	1.96	1.96	2.31	2.04	2.74	2.60	2.43	3.06	3.16	2.88	30.68	Inch
				10.4	7.7	6.4	6.4	7.5	6.6	8.9	8.5	7.9	10.0	10.3	9.4	100.0	%
"	Llynrhiw	1428	SH(23)975207	10.35	7.70	5.00	4.90	4.54	4.69	5.63	6.66	6.48	9.20	9.14	9.38	83.67	Inch
				12.4	9.2	6.0	5.9	5.4	5.6	6.7	8.0	7.7	11.0	10.9	11.2	100.0	%
"	Lake Vyrnwy, Bryn Vyrnwy	770	SJ(33)018189	7.85	5.78	3.87	3.90	3.67	3.56	4.33	4.85	4.83	6.95	6.83	6.74	63.16	Inch
				12.4	9.2	6.1	6.2	5.8	5.6	6.9	7.7	7.6	11.0	10.8	10.7	100.0	%
Salop	Shrewsbury	184	SJ(33)514138	2.39	1.70	1.62	1.85	2.10	1.73	2.40	2.50	2.14	2.65	2.47	2.20	25.75	Inch
				9.3	6.6	6.3	7.2	8.2	6.7	9.3	9.7	8.3	10.3	9.6	8.5	100.0	%
Staffs.	Maer Hall	410	SJ(33)794382	3.26	2.43	2.07	2.23	2.53	2.07	3.43	3.32	2.90	3.51	3.40	3.15	34.30	Inch
				9.5	7.1	6.0	6.5	7.4	6.0	10.0	9.7	8.5	10.2	9.9	9.2	100.0	%
"	Norbury Junction	331	SJ(33)793228	2.64	1.95	1.77	2.01	2.26	1.93	2.89	2.78	2.29	3.01	2.66	2.47	28.66	Inch
				9.2	6.8	6.2	7.0	7.9	6.7	10.1	9.7	8.0	10.5	9.3	8.6	100.0	%
Salop	Chetwynd Park	230	SJ(33)733215	2.77	2.01	1.80	2.02	2.38	1.92	2.83	2.80	2.36	2.98	2.75	2.48	29.10	Inch
				9.5	6.9	6.2	7.0	8.2	6.6	9.7	9.6	8.1	10.2	9.5	8.5	100.0	%
"	Newport, Ag. College	211	SJ(33)712204	2.35	1.75	1.64	1.79	2.18	1.73	2.65	2.53	2.18	2.69	2.49	2.12	26.10	Inch
				9.0	6.7	6.3	6.9	8.4	6.6	10.1	9.7	8.4	10.3	9.5	8.1	100.0	%
"	Weston Park	400	SJ(33)806108	2.68	1.95	1.76	1.94	2.29	1.85	3.02	2.63	2.22	2.86	2.78	2.41	28.39	Inch
				9.4	6.9	6.2	6.8	8.1	6.5	10.6	9.3	7.8	10.1	9.8	8.5	100.0	%
"	Hatton Grange	262	SJ(33)765043	2.48	1.88	1.73	1.93	2.30	1.77	2.88	2.55	2.06	2.69	2.64	2.32	27.23	Inch
				9.1	6.9	6.3	7.1	8.4	6.5	10.6	9.4	7.6	9.9	9.7	8.5	100.0	%

TABLE I. Monthly and Annual Averages of Rainfall, 1916-1950, (in inches)
Severn River Board Area - continued

County	Station	Alt. ft.	N.G.R.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Year	
Worces.	Stourbridge Pumping Station	212	SO(32)893844	2.94	2.01	1.81	2.18	2.64	1.91	3.01	2.90	2.34	2.89	3.06	2.58	30.27	Inch
				9.7	6.6	6.0	7.2	8.7	6.3	10.0	9.6	7.7	9.6	10.1	8.5	100.0	%
Staffs.	Wolverhampton, West Park	430	SO(32)906990	2.63	1.99	1.68	1.97	2.35	1.84	2.94	2.82	2.30	2.80	2.80	2.33	28.45	Inch
				9.3	7.0	5.9	6.9	8.3	6.5	10.3	9.9	8.1	9.8	9.8	8.2	100.0	%
"	Ashwood Pumping Station	207	SO(32)866878	2.56	1.83	1.64	1.95	2.24	1.68	2.73	2.60	2.24	2.57	2.69	2.30	27.03	Inch
				9.5	6.8	6.1	7.2	8.3	6.2	10.1	9.6	8.3	9.5	9.9	8.5	100.0	%
Worces.	Park Hall	200	SO(32)864778	2.67	1.87	1.77	1.98	2.38	1.75	2.74	2.50	2.20	2.61	2.67	2.36	27.50	Inch
				9.7	6.8	6.4	7.2	8.6	6.4	10.0	9.1	8.0	9.5	9.7	8.6	100.0	%
"	Lincombe Lock	62	SO(32)822694	2.72	1.86	1.78	1.96	2.37	1.60	2.48	2.46	2.14	2.56	2.60	2.32	26.85	Inch
				10.1	6.9	6.6	7.3	8.8	6.0	9.2	9.2	8.0	9.5	9.7	8.7	100.0	%
"	Holt Lock	55	SO(32)821632	2.52	1.71	1.60	1.81	2.36	1.59	2.41	2.23	2.16	2.43	2.41	2.16	25.39	Inch
				9.9	6.7	6.3	7.1	9.3	6.3	9.5	8.8	8.5	9.6	9.5	8.5	100.0	%
"	Bevere Lock	51	SO(32)837594	2.37	1.62	1.59	1.86	2.30	1.49	2.31	2.26	2.07	2.39	2.38	2.13	24.77	Inch
				9.6	6.5	6.4	7.5	9.3	6.0	9.3	9.1	8.4	9.7	9.6	8.6	100.0	%
"	Diglis Lock	48	SO(32)847533	2.56	1.70	1.58	1.88	2.37	1.56	2.33	2.31	2.14	2.38	2.51	2.21	25.53	Inch
				10.0	6.7	6.2	7.4	9.3	6.1	9.1	9.0	8.4	9.3	9.8	8.7	100.0	%
Salop	Church Stretton	582	SO(32)438909	3.55	2.61	2.35	2.56	2.66	2.18	2.97	3.19	2.72	3.47	3.67	3.34	35.27	Inch
				10.1	7.4	6.7	7.3	7.5	6.2	8.4	9.0	7.7	9.8	10.4	9.5	100.0	%
"	Oakley Park	300	SO(32)491762	3.05	2.20	1.92	2.17	2.46	1.87	2.64	2.75	2.32	3.00	3.15	2.78	30.31	Inch
				10.1	7.2	6.3	7.2	8.1	6.2	8.7	9.1	7.6	9.9	10.4	9.2	100.0	%
Worces.	Malvern	203	SO(32)790461	2.95	2.03	1.91	2.16	2.54	1.83	2.61	2.66	2.41	2.83	2.88	2.69	29.50	Inch
				10.0	6.9	6.5	7.3	8.6	6.2	8.8	9.0	8.2	9.6	9.8	9.1	100.0	%
Leices.	Welford Reservoir	425	SP(42)643808	2.37	1.80	1.65	2.11	2.08	1.87	2.61	2.38	2.32	2.53	2.73	2.14	26.59	Inch
				8.9	6.8	6.2	7.9	7.8	7.0	9.8	9.0	8.7	9.5	10.3	8.1	100.0	%
Warwicks.	Coventry	338	SP(42)326770	2.48	1.79	1.63	2.01	2.18	1.74	2.62	2.54	2.21	2.45	2.59	2.30	26.54	Inch
				9.3	6.7	6.1	7.6	8.2	6.6	9.9	9.6	8.3	9.2	9.8	8.7	100.0	%
"	Warwick, Mill Street	197	SP(42)286647	2.40	1.79	1.66	1.97	2.11	1.67	2.52	2.40	2.29	2.56	2.55	2.14	26.06	Inch
				9.2	6.9	6.4	7.5	8.1	6.4	9.7	9.2	8.8	9.8	9.8	8.2	100.0	%

TABLE I. Monthly and Annual Averages of Rainfall, 1916-1950, (in inches)
Severn River Board Area - continued

County	Station	Alt. ft.	N.G.R.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Year	
Warwicks.	Ashorne	150	SP(42)306577	2.17 8.9	1.64 6.7	1.59 6.5	1.87 7.6	2.10 8.6	1.59 6.5	2.40 9.8	2.34 9.5	2.20 9.0	2.23 9.1	2.41 9.8	1.97 8.0	24.51 100.0	Inch %
"	Stratford-on-Avon	122	SP(42)195540	2.27 9.2	1.64 6.6	1.50 6.1	1.89 7.6	2.12 8.6	1.69 6.8	2.38 9.6	2.30 9.3	2.24 9.1	2.37 9.6	2.35 9.5	1.99 8.0	24.74 100.0	Inch %
Oxford.	Sibford Ferris	570	SP(42)356373	2.58 9.2	2.02 7.2	1.78 6.4	2.17 7.8	2.32 8.3	1.74 6.2	2.58 9.2	2.28 8.1	2.45 8.8	2.70 9.6	2.83 10.1	2.55 9.1	28.00 100.0	Inch %
Worces.	Lower Bittal Reservoir	457	SP(42)021743	2.93 9.6	2.11 6.9	1.90 6.2	2.33 7.6	2.49 8.1	2.03 6.6	2.99 9.7	2.78 9.1	2.53 8.2	2.86 9.3	3.00 9.8	2.72 8.9	30.67 100.0	Inch %
Warwicks.	Moor Hall	110	SP(42)088537	2.22 9.0	1.53 6.2	1.48 6.0	1.90 7.7	2.20 8.9	1.66 6.7	2.57 10.4	2.35 9.5	2.16 8.7	2.40 9.7	2.27 9.2	1.98 8.0	24.72 100.0	Inch %
Worces.	Bengeworth	128	SP(42)048442	2.18 9.0	1.50 6.2	1.52 6.3	1.82 7.5	2.18 9.0	1.59 6.5	2.36 9.7	2.26 9.3	2.20 9.0	2.37 9.7	2.32 9.5	2.01 8.3	24.31 100.0	Inch %
"	Evesham, Abbey Road P. Station	85	SP(42)034433	2.22 9.1	1.52 6.3	1.51 6.2	1.77 7.3	2.19 9.0	1.57 6.5	2.36 9.7	2.27 9.4	2.15 8.9	2.36 9.7	2.31 9.5	2.03 8.4	24.26 100.0	Inch %
"	Cookhill	400	SP(42)053589	2.46 9.3	1.68 6.4	1.61 6.1	1.95 7.4	2.20 8.4	1.75 6.6	2.67 10.1	2.49 9.4	2.28 8.7	2.54 9.6	2.52 9.6	2.22 8.4	26.37 100.0	Inch %
Glouces.	Hewlett's Reservoir	419	SO(32)974223	2.72 9.6	1.99 7.0	1.78 6.3	2.12 7.5	2.23 7.9	1.87 6.6	2.48 8.7	2.52 8.9	2.31 8.1	2.75 9.7	2.88 10.2	2.70 9.5	28.35 100.0	Inch %
"	Forthampton Court	48	SO(32)870318	2.56 9.5	1.76 6.6	1.72 6.4	1.96 7.3	2.32 8.6	1.60 6.0	2.49 9.3	2.47 9.2	2.35 8.7	2.67 9.9	2.56 9.5	2.41 9.0	26.87 100.0	Inch %
"	Dowdeswell Reservoir	357	SO(32)984198	2.93 9.7	2.22 7.4	1.97 6.6	2.21 7.4	2.33 7.8	1.87 6.2	2.50 8.3	2.60 8.6	2.46 8.2	2.89 9.6	3.13 10.4	2.95 9.8	30.06 100.0	Inch %
"	Cheltenham, Sandford Mead	210	SO(32)953216	2.56 9.4	1.93 7.1	1.72 6.3	2.00 7.3	2.11 7.7	1.80 6.6	2.42 8.9	2.40 8.8	2.30 8.4	2.70 9.9	2.82 10.3	2.53 9.3	27.29 100.0	Inch %
"	Witcombe Reservoir	297	SO(32)903147	2.82 9.7	2.09 7.2	1.91 6.6	2.08 7.2	2.23 7.7	1.78 6.1	2.59 8.9	2.70 9.3	2.43 8.4	2.82 9.7	2.86 9.8	2.74 9.4	29.05 100.0	Inch %
"	Haresfield Court	100	SO(32)810090	3.13 9.8	2.27 7.1	2.14 6.7	2.25 7.1	2.48 7.8	2.02 6.3	2.89 9.0	2.79 8.7	2.69 8.4	3.15 9.9	3.19 10.0	2.95 9.2	31.95 100.0	Inch %

TABLE I. Monthly and Annual Averages of Rainfall, 1916-1950, (in inches)
Severn River Board Area - continued

County	Station	Alt. ft.	N.G.R.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Year	
Glouces.	Whitminster	32	SO(32)775085	3.03	2.09	2.05	2.13	2.40	1.83	2.70	2.93	2.66	3.11	3.08	2.83	30.84	Inch
				9.8	6.8	6.6	6.9	7.8	5.9	8.8	9.5	8.6	10.1	10.0	9.2	100.0	%
"	Stonehouse	135	SO(32)808051	2.84	2.09	2.06	2.09	2.23	1.73	2.62	2.74	2.40	2.82	2.79	2.66	29.07	Inch
				9.8	7.2	7.1	7.2	7.7	5.9	9.0	9.4	8.3	9.7	9.6	9.1	100.0	%
				Now terminated or listed in Tables IV, V and VI													
Mtgomery.	Llanymynech, White Rock	350	SJ(33)254217	3.05	2.29	1.90	1.90	2.35	1.81	2.57	2.84	2.27	3.14	3.00	2.67	29.79	Inch
				10.2	7.7	6.4	6.4	7.9	6.1	8.6	9.5	7.6	10.5	10.1	9.0	100.0	%
Hereford.	Kimbolton, Grantsfield	424	SO(32)526603	2.79	1.94	1.83	2.01	2.44	1.76	2.52	2.57	2.24	2.80	2.86	2.55	28.31	Inch
				9.9	6.8	6.5	7.1	8.6	6.2	8.9	9.1	7.9	9.9	10.1	9.0	100.0	%
Warwicks.	Birmingham, Edgbaston	536	SP(42)04684 6	2.98	2.21	1.87	2.30	2.58	1.90	2.86	2.76	2.49	2.89	3.16	2.70	30.70	Inch
				9.7	7.2	6.1	7.5	8.4	6.2	9.3	9.0	8.1	9.4	10.3	8.8	100.0	%
Mtgomery.	Lake Vyrnwy, Hool-y-ffridd	915		9.69	7.09	4.87	4.73	4.17	4.10	4.78	5.80	5.68	8.25	8.09	8.43	75.68	Inch
				12.8	9.4	6.4	6.3	5.5	5.4	6.3	7.7	7.5	10.9	10.7	11.1	100.0	%
"	Llanidloes, Mount Severn	600	SN(22)94084 0	6.08	4.67	3.13	3.42	3.10	2.90	3.76	4.19	4.16	5.48	5.73	5.64	52.26	Inch
				11.6	8.9	6.0	6.5	5.9	5.6	7.2	8.0	8.0	10.5	11.0	10.8	100.0	%

TABLE II. Estimated Annual Averages of Rainfall, 1916-1950, (in inches) for short period stations. Severn River Board Area.

County	Station	Annual Average in.	Alt. ft.	N.G.R.
Gloucester.	Bournstream	32.94	300	ST(31)750945
"	Upper Cam	33.76	350	ST(31)764988
Mtgomery.	Hafren Lodge	61.53	800	SN(22)889853
"	Dol Bachog	62.32	1030	SN(22)884936
"	Cwm Biga	75.57	1015	SN(22)857890
"	Hafod Cadwgan	77.54	1150	SN(22)959905
"	Gregynog Hall	35.44	650	SO(32)080969
"	Mochdre	38.63	650	SO(32)079871
"	Rhiwargar	73.43	860	SH(23)961242
"	Carreg Gooh	73.76	1780	SH(23)974237
"	Gadfa	90.60	1521	SH(23)928232
"	Eunant Bridge	75.69	830	SH(23)962224
"	Nant Cawell	86.37	1610	SH(23)936208
"	Lluest-Wen	83.29	1620	SH(23)971202
"	Heol-y-Ffridd	75.05	830	SH(23)976215
"	Ty Uchaf	67.22	860	SH(23)998215
"	Erw Berfedd	82.30	1800	SH(23)978264
"	Hen Eglwys	73.58	1420	SH(23)993253
"	Fron Goch	65.00	835	SJ(33)002213
"	Bryn Gwyn	70.10	1311	SH(23)999196
"	Fawnog	64.79	1315	SJ(33)014219
"	Lake Vyrnwy	65.15	995	SJ(33)016192
"	Tyn-y-Ffridd	59.86	1010	SJ(33)040213
"	Hên Gerig	81.75	1230	SH(23)068188
"	Cownwy Dam	63.99	929	SJ(33)000181
"	Afon Twrch	78.45	1390	SH(23)941180
"	Cerniau	79.73	1160	SH(23)951169
"	Dol-y-Gaseg	70.85	810	SH(23)969149
"	Abercannon Farm	68.27	800	SH(23)962069
"	Pennant Melangell	61.11	660	SJ(33)023265
"	Hirnant	59.02	766	SJ(33)048225
"	Rhiwlas	47.47	748	SJ(33)114260
Denbighshire	Penygwely Reservoir No. 1	41.61	1115	SJ(33)220324
Shropshire	Llanyblodwel	35.90	300	SJ(33)232236
"	Llanforda	36.52	702	SJ(33)272297
"	Oswestry	35.65	570	SJ(33)278296
"	Mount Reservoir	36.51	698	SJ(33)275304
"	Oswestry, Llwyn Terrace	34.64	430	SJ(33)294301
"	Worthen	29.72	395	SJ(33)326045
"	Wellington, Wrekin College	26.80	340	SJ(33)655117
"	Allscott	25.91	200	SJ(33)605128
"	Shawbury	25.97	235	SJ(33)553220
"	Woolstaston	34.40	745	SO(32)449986
"	Harnage Grange	28.56	384	SJ(33)569021
"	Folley	27.31	230	SO(32)771978
"	Bridgnorth	26.73	245	SO(32)709932
"	Stanmore Hall	26.66	296	SO(32)742922
"	Morville Hall	28.07	300	SO(32)668940
Worcester.	Elan Aqueduct	29.19	91	SO(32)776784
"	Ribbesford	28.60	516	SO(32)768737
"	Halesowen	29.97	505	SO(32)948822
Staffordshire	Lye Pumping Station	27.36	245	SO(32)918851
"	Tettenhall Water Works	28.52	468	ST(33)885001
"	Prestwood	26.50	179	SO(32)859858
"	Kinver	26.85	152	SO(32)848835
Worcester.	Wolverley	28.02	250	SO(32)821798
"	Clent Hall	29.85	600	SO(32)929792
"	Kidderminster	26.22	245	SO(32)843786
"	Kidderminster, St. John's Avenue	25.96	250	SO(32)817764
"	Washing Stock	28.01	366	SO(32)959732
"	Burcot P. Station	28.91	432	SO(32)984716
"	Bromsgrove S. Works	27.65	220	SO(32)956685
"	Tardebigge Reservoir	29.65	455	SO(32)989690
"	Worcester Water Works	25.30	57	SO(32)841565

TABLE II Estimated Annual Averages of Rainfall, 1916-1950, (in inches)
for short period stations
Severn River Board Area - continued

County	Station	Annual Average in.	Alt. ft.	N.G.R.
Mtgomery.	Anchor	48.27	1250	SO(32)172857
Shropshire	Totterton Hall	31.94	700	SO(32)360874
"	Bucknell	32.07	480	SO(32)355735
Herfordshire	Downton Castle	29.87	456	SO(32)444747
Shropshire	Westhope Cottage	29.96	610	SO(32)475863
"	Dingle Leys	34.62	730	SO(32)624850
"	Chilton	31.51	410	SO(32)673781
Worcester.	Shelsley Beauchamp	27.37	132	SO(32)731630
"	British Camp Reservoir	27.70	677	SO(32)764399
Gloucester.	Tewkesbury P. Station	25.60	47	SO(32)890337
"	Tewkesbury, Upper Lode	25.56	41	SO(32)881328
Northampton.	Naseby Reservoir	27.16	519	SP(42)669780
Leicester.	North Kilworth W. Works	26.24	490	SP(42)618840
Warwickshire	Avon Water Works.	25.43	285	SP(42)512763
Leicester.	Lutterworth Water Works	26.72	365	SP(42)548840
Warwickshire	Bedworth Water Works	26.82	346	SP(42)354866
"	Coundon Reservoir	28.66	377	SP(42)319808
"	Coventry, Belvedere Road	28.52	362	SP(42)324778
"	Kenilworth	27.95	294	SP(42)289721
"	Bilton Grange	25.64	400	SP(42)489716
"	Dunchurch, Winton Hall	27.00	390	SP(42)484471
"	Southam, Banbury Road	25.60	250	SP(42)416612
"	Warwick, St. Nicholas Park	25.64	155	SP(42)287649
"	Hatton	27.76	310	SP(42)243668
"	Wellesbourne	25.03	153	SP(42)271565
"	Snitterfield	24.71	274	SP(42)207584
"	Stratford-on-Avon, Thurlaston	24.88	135	SP(42)206540
"	Weston	27.68	510	SP(42)287345
Gloucester.	Chipping Campden	33.19	389	SP(32)169396
"	Chipping Campden, Leysbourne	30.48	470	SP(42)153394
"	Blockley	32.27	450	SP(42)165348
Warwickshire	Shipston-on-Stour	26.52	364	SP(42)213407
"	Luddington	23.64	138	SP(42)154528
"	Stratford-on-Avon	23.96	160	SP(42)164549
Worces.	Barnt Green	32.30	650	SO(32)996732
"	Brockhill P. Station	29.60	439	SP(42)001701
Warwickshire	Studley College	26.31	256	SP(42)088640
"	Alcester, The Pleck	25.93	250	SP(42)078589
"	Alcester, Council Office	25.55	140	SP(42)092579
"	Alcester, Arrowside	24.85	148	SP(42)091574
Worcest.	Bretforton Manor	25.86	130	SP(42)092440
"	Evesham, High Street	24.50	120	SP(42)040445
Gloucester.	Sudeley Castle	29.70	310	SP(42)030282
Worcester.	Pershore, Institute of Horticulture	25.47	130	SO(32)960450
"	Overbury Court	25.81	212	SO(32)956373
Gloucester.	Cheltenham	26.30	214	SO(32)946218
Hereford.	Putley, The Sladd	27.96	360	SO(32)646382
Gloucester.	Bromsberrow Heath P. Station	28.50	181	SO(32)738332
Hereford.	Kilcot	30.67	210	SO(32)681255
Gloucester.	Taynton	29.80	80	SO(32)742216
"	Miserden Park	37.32	800	SO(32)938087
"	Ruscombe	31.86	610	SO(32)837077
"	Minchinhampton, Rectory Cottage	35.33	610	SO(32)873008
"	Edgehills Lodge	32.62	915	SO(32)663158
"	Blakeney Hill Lodge	32.83	440	SO(32)661086
"	Serridge Lodge	33.00	610	SO(32)618141
"	Parkend	37.88	325	SO(32)607085

TABLE III. Monthly Averages of Rainfall, 1916-1950, estimated for short period stations (in inches)

Severn River Board Area.

County	Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Year
Mtgomery.	Lake Vyrnwy	8.08	5.99	3.97	4.04	3.65	3.65	4.43	5.08	5.02	7.10	6.97	7.17	65.15
Salop	Shawbury	2.44	1.74	1.64	1.82	2.13	1.71	2.47	2.52	2.15	2.67	2.47	2.21	25.97
Warwicks.	Stratford-on-Avon	1.80	1.58	1.61	1.53	1.99	2.06	2.25	2.49	1.65	2.57	2.13	2.30	23.96
"	Wellesbourne	2.30	1.68	1.58	1.90	2.15	1.65	2.43	2.28	2.28	2.35	2.43	2.00	25.03
Glouces.	Cheltenham	2.47	1.87	1.66	1.92	2.02	1.74	2.34	2.31	2.21	2.60	2.71	2.45	26.30
"	Ruscombe	3.12	2.29	2.10	2.20	2.49	1.94	2.87	3.00	2.68	3.12	3.12	2.93	31.86

TABLE IVa 35-Year Totals of Daily Rainfall, in inches, 1916-1950

Lake Vyrnwy

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
1	13.70	10.86	4.58	8.88	3.40	6.14	4.63	3.76	8.52	5.20	9.66	9.87
2	9.58	8.75	2.37	5.14	2.10	4.37	2.21	2.79	4.50	6.46	10.27	8.95
3	7.37	8.08	5.08	5.30	3.85	5.39	4.71	3.86	7.09	10.69	7.45	7.95
4	6.41	5.46	6.93	4.27	4.38	4.63	6.13	4.18	4.98	9.89	7.32	9.53
5	10.09	7.71	6.56	5.11	7.22	4.25	5.34	4.78	3.61	9.49	10.02	7.81
6	11.91	7.88	5.19	4.32	3.86	3.59	5.33	2.68	5.42	8.36	7.76	6.97
7	7.37	11.02	4.56	5.85	2.83	4.19	3.37	6.97	6.30	7.39	5.38	9.89
8	7.86	9.66	1.94	4.92	2.69	4.54	3.27	5.95	3.52	8.48	6.90	6.34
9	12.18	14.66	2.87	6.19	3.75	6.07	4.83	4.70	3.94	12.17	6.56	5.69
10	11.93	7.35	4.18	3.92	3.89	2.95	4.23	4.87	3.61	8.57	6.90	8.79
11	9.29	6.08	2.81	4.46	3.03	4.05	4.34	5.31	2.80	5.87	12.05	5.70
12	13.24	8.44	3.33	3.29	6.39	5.00	5.60	4.80	6.62	3.22	7.44	2.27
13	6.13	2.20	2.75	6.95	2.78	2.86	5.11	4.97	5.91	8.04	8.49	7.12
14	10.04	5.43	3.08	5.55	2.50	4.91	4.26	4.99	9.02	5.81	9.74	6.97
15	7.20	9.46	4.34	5.19	6.10	3.91	6.19	4.78	5.88	3.92	6.89	5.41
16	8.10	6.77	4.83	4.64	3.31	2.09	3.93	6.54	8.13	5.76	8.31	7.11
17	10.32	4.97	4.33	3.48	5.79	3.71	5.10	7.01	7.71	9.85	6.11	4.18
18	9.99	2.86	5.78	2.52	3.42	6.76	8.39	5.82	6.56	7.85	10.27	5.97
19	5.20	7.05	6.10	3.37	2.86	3.67	4.72	5.60	9.24	7.67	9.09	3.71
20	6.45	5.25	3.72	3.22	3.30	4.93	3.90	7.00	6.31	6.14	7.63	5.12
21	8.51	5.87	4.69	3.42	1.77	3.71	3.85	7.50	5.89	8.59	9.61	7.20
22	9.17	7.58	4.40	3.30	4.64	2.95	7.72	6.68	7.43	8.54	10.51	7.60
23	7.98	2.80	4.59	4.69	4.65	2.32	4.52	5.82	5.56	8.04	9.53	6.51
24	8.39	6.86	3.44	4.56	3.76	2.27	3.64	6.23	6.03	12.98	6.44	6.25
25	6.25	6.33	3.81	5.67	4.73	2.91	4.85	4.51	6.22	8.53	8.71	8.43
26	5.74	7.29	4.34	3.30	4.87	2.36	3.77	4.92	3.12	10.65	5.45	10.85
27	6.05	9.15	3.75	3.25	7.75	4.73	6.83	7.16	4.85	6.11	8.59	8.42
28	8.11	5.10	4.76	3.94	4.79	6.71	6.35	8.64	2.48	4.79	3.87	12.66
29	10.33	1.42	6.93	4.34	4.90	4.22	6.36	9.66	3.12	8.72	5.49	12.60
30	6.98	-	3.83	4.35	3.60	4.24	4.48	2.85	4.46	7.69	7.30	12.45
31	12.93	-	5.62	-	5.35	-	3.71	4.40	-	7.78	-	7.64

TABLE IVa continued. 35-Year Daily Totals of Rainfall, in inches, 1916-1950

Grantsfield

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
1	4.23	2.28	1.98	3.05	4.14	4.02	2.02	3.40	4.00	2.02	4.28	3.40
2	1.83	2.81	1.20	2.82	1.78	.99	1.46	2.35	2.39	1.83	3.82	2.16
3	1.73	2.95	1.98	3.35	2.02	1.28	2.46	2.48	3.68	3.64	3.87	1.77
4	1.83	2.30	2.54	3.71	2.74	2.14	2.31	2.39	1.71	2.36	3.99	3.87
5	3.36	2.26	2.65	3.02	3.94	2.50	3.57	2.90	1.63	3.70	3.24	2.70
6	3.43	2.85	2.63	2.38	2.05	2.83	3.71	1.58	2.41	2.62	3.69	2.65
7	1.21	2.98	1.31	1.65	3.02	1.63	3.33	3.82	1.75	3.61	2.73	3.73
8	2.62	2.25	1.11	1.78	1.70	2.34	1.85	4.21	2.81	4.08	4.03	2.95
9	3.83	3.12	1.42	2.38	2.06	2.80	2.02	3.56	1.40	3.53	3.11	2.63
10	5.04	1.77	2.04	2.07	2.05	1.26	2.12	4.07	.62	4.61	2.96	3.70
11	4.62	2.85	2.15	2.57	1.90	1.37	3.16	1.50	.80	1.76	4.35	2.55
12	4.27	2.81	1.48	1.76	2.86	3.18	5.05	3.13	4.77	1.82	2.14	1.17
13	1.48	.88	2.00	2.68	.89	1.42	5.16	1.90	3.16	1.31	2.47	3.65
14	4.12	1.75	3.11	2.01	1.58	2.73	2.22	1.95	3.19	1.88	3.89	3.56
15	3.49	1.80	1.77	2.54	3.15	1.67	6.77	2.19	2.06	2.14	2.82	2.47
16	2.52	2.63	3.09	3.58	2.34	1.73	2.58	1.80	2.36	3.30	4.92	2.34
17	2.68	2.54	1.90	.98	2.09	3.33	3.15	2.77	3.72	3.16	1.58	2.05
18	4.16	1.77	1.95	2.20	2.24	2.01	2.09	2.80	4.68	2.53	5.52	2.09
19	2.12	2.40	4.02	2.38	2.73	2.11	3.52	2.69	3.70	4.67	4.23	2.80
20	2.89	1.70	2.25	2.02	2.69	1.42	3.13	2.85	3.38	3.49	4.54	1.77
21	3.04	2.19	2.28	2.15	1.81	5.04	4.21	3.10	2.70	4.05	3.87	2.54
22	3.45	2.41	1.62	1.17	2.73	1.21	1.90	4.77	4.15	3.89	2.97	2.92
23	1.73	1.12	1.89	1.67	4.08	1.11	1.88	3.61	2.65	3.98	3.68	2.80
24	2.75	3.38	1.90	1.54	2.20	2.00	1.39	2.13	3.02	4.46	2.18	2.45
25	2.72	3.04	1.81	3.39	2.69	1.74	2.43	3.64	2.05	4.06	1.86	3.08
26	4.24	3.18	1.21	1.39	5.25	1.11	3.85	1.66	1.09	4.18	2.69	3.26
27	2.87	2.72	2.20	2.33	5.14	1.30	2.85	4.10	1.56	2.79	3.06	3.19
28	5.03	2.37	2.13	1.84	2.79	1.13	2.38	4.22	.99	1.24	2.97	2.79
29	2.68	.89	2.11	2.95	3.05	2.22	1.92	3.52	2.40	4.32	2.09	3.91
30	3.22	-	1.62	2.87	1.50	1.97	1.80	2.77	3.55	2.90	2.57	4.79
31	4.44	-	2.60	-	6.33	-	1.90	2.16	-	4.03	-	3.35

TABLE IVa continued. 35-Year Totals of Daily Rainfall, in inches, 1916-1950.

Cheltenham

Day		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
1		4.38	2.53	1.47	2.28	2.24	3.15	2.69	3.00	2.32	1.24	4.20	3.63
2		2.67	3.01	1.38	2.53	1.40	2.21	1.21	2.42	3.40	1.75	2.41	1.60
3		3.01	3.09	1.22	2.65	1.66	1.67	3.85	2.89	4.24	3.59	4.21	1.91
4		2.44	1.15	3.45	3.65	1.33	1.96	2.72	2.64	2.66	3.58	4.63	3.66
5		2.64	2.79	2.68	3.52	3.48	2.69	2.49	1.90	1.67	3.77	4.16	2.17
6		2.89	2.57	1.46	1.65	2.44	2.08	3.75	.64	2.08	2.56	4.29	3.74
7		2.08	3.64	1.72	1.68	3.31	2.09	2.63	3.06	1.70	3.60	3.01	3.92
8		2.33	3.22	.82	2.58	1.55	1.23	2.31	2.98	1.63	4.70	3.68	3.29
9		3.03	2.88	1.38	2.73	1.13	2.80	2.16	3.08	1.71	2.93	2.95	2.13
10		4.51	2.94	2.58	2.99	1.50	1.33	2.07	3.61	1.07	3.66	2.45	2.48
11		3.85	1.60	1.66	2.33	1.79	1.20	2.04	2.02	1.62	3.39	3.61	2.46
12		3.06	2.72	2.09	1.86	2.60	3.25	2.41	1.29	3.13	2.02	2.35	1.09
13		1.32	.77	1.69	2.56	.58	1.77	3.82	2.06	2.08	1.64	2.83	3.37
14		2.90	1.40	2.88	2.62	2.36	3.05	4.79	1.53	4.57	1.56	3.23	3.25
15		3.49	1.38	1.35	2.78	2.47	2.09	5.07	2.11	1.26	1.68	3.08	2.59
16		2.10	2.37	2.93	3.46	1.11	1.38	1.35	2.58	2.20	1.83	4.18	2.68
17		2.27	3.12	1.81	1.98	1.96	.78	3.38	2.10	3.43	3.50	3.27	1.32
18		3.46	1.79	1.64	1.77	2.11	5.60	2.09	2.81	4.71	2.78	6.18	2.11
19		2.48	1.71	3.29	2.52	3.40	1.66	3.21	3.12	4.38	3.93	3.44	1.22
20		1.87	1.83	2.30	1.71	4.16	2.72	2.10	2.82	3.81	3.59	4.69	1.86
21		2.29	2.26	1.69	1.73	2.13	1.35	2.76	4.15	3.03	3.32	2.48	2.95
22		2.98	3.05	1.75	.80	1.45	2.72	1.98	3.57	4.19	5.21	3.45	3.67
23		1.64	2.14	1.21	1.71	4.64	1.34	1.61	3.11	3.56	5.33	3.64	2.81
24		2.21	3.62	1.90	1.27	1.66	1.32	1.00	2.16	3.58	4.47	2.72	2.46
25		2.41	4.51	1.51	3.01	2.89	1.09	2.58	2.73	2.80	5.86	1.14	2.73
26		3.34	2.94	1.31	2.11	5.65	1.61	4.52	1.30	1.65	4.62	2.42	3.93
27		2.26	1.95	2.73	3.13	4.90	2.22	2.77	4.22	1.43	2.80	2.64	4.18
28		4.55	2.27	1.62	2.86	1.99	2.02	2.61	2.66	1.15	.98	3.88	3.31
29		2.41	.57	2.06	2.38	2.78	1.64	1.70	4.36	2.48	3.35	2.25	2.83
30		2.65	-	.74	2.07	1.38	2.54	2.49	3.22	3.11	2.72	2.95	4.42
31		4.27	-	3.83	-	3.36	-	1.97	1.59	-	3.00	-	3.65

TABLE IVa 35-Year Totals of Daily Rainfall, 1916-1950 (in inches)

Edgbaston

Day	Jan	Feb	Mar	Apr	May	June	Jly	Aug	Sep	Oct	Nov	Dec
1	4.35	3.32	1.71	3.19	3.28	2.80	1.97	3.57	3.07	1.23	4.76	3.08
2	2.12	4.09	1.27	4.02	2.42	2.15	3.43	3.45	3.36	1.75	3.56	1.99
3	3.31	3.66	1.48	2.75	2.06	1.69	2.27	2.75	4.99	3.67	2.52	1.68
4	1.92	1.38	3.53	3.53	2.57	1.38	2.60	2.03	2.33	2.31	4.13	4.49
5	2.63	3.53	2.48	3.76	4.70	2.81	3.61	2.82	2.30	3.80	4.43	2.13
6	2.79	2.20	1.45	2.50	3.17	2.90	2.46	4.17	2.73	2.88	4.77	2.44
7	2.33	3.85	1.93	2.18	1.90	1.59	2.34	3.98	1.93	2.53	2.47	3.36
8	2.92	2.48	0.87	2.28	2.45	1.77	2.90	4.34	2.32	5.61	3.19	2.43
9	3.17	3.31	1.56	2.07	1.83	3.16	2.68	4.20	1.96	3.74	3.59	2.95
10	3.86	1.94	2.46	1.89	3.13	2.37	2.58	3.57	1.21	3.75	2.95	2.16
11	4.44	2.11	1.61	1.87	2.50	1.70	2.43	2.63	1.44	1.51	4.94	3.02
12	3.31	3.09	1.80	2.19	2.54	3.12	3.44	3.15	4.37	1.77	2.15	1.17
13	1.98	1.22	2.00	3.75	0.80	2.47	3.85	1.85	2.17	1.36	3.45	3.22
14	3.98	1.65	2.87	2.32	2.70	3.45	4.75	3.05	4.29	1.57	4.26	3.43
15	3.58	1.65	2.09	2.37	3.34	1.66	5.64	1.83	1.50	2.05	2.69	2.41
16	2.06	2.74	3.18	3.33	1.88	2.02	1.94	1.76	2.50	3.35	4.48	2.57
17	2.48	2.59	2.18	2.13	2.78	1.78	4.10	2.33	3.99	4.23	3.05	1.43
18	4.61	2.04	1.46	1.94	2.99	3.18	2.75	2.01	3.71	2.25	6.22	2.03
19	2.68	2.83	3.26	2.69	2.19	1.99	4.77	2.94	4.63	3.78	4.35	2.63
20	2.40	2.20	2.03	2.46	3.44	0.96	2.60	4.89	3.69	2.67	4.12	1.83
21	3.02	1.84	1.72	1.71	3.95	2.72	4.09	3.00	4.98	3.31	4.26	3.80
22	3.73	2.97	2.00	1.00	2.42	1.70	4.33	3.12	3.24	5.01	2.42	3.84
23	2.43	1.04	2.12	2.20	3.70	1.21	3.54	3.54	3.98	4.26	3.46	3.58
24	2.27	3.24	1.69	1.18	2.20	2.02	1.11	1.43	3.25	4.56	3.41	2.88
25	3.54	2.78	2.05	4.25	2.71	1.56	2.62	2.19	2.47	4.28	2.25	2.35
26	4.17	3.46	1.79	2.68	3.17	1.73	2.61	1.87	1.14	4.04	2.78	3.41
27	2.78	3.08	1.73	3.93	3.94	1.52	2.43	4.18	1.35	3.06	2.90	4.15
28	5.23	2.87	1.36	2.03	3.42	1.82	3.16	4.55	0.88	1.63	3.57	3.37
29	3.26	0.67	2.72	2.39	3.96	1.71	3.01	4.30	2.24	4.19	2.13	3.32
30	2.96	-	1.57	2.21	1.17	3.06	4.92	2.35	3.70	2.87	2.81	6.91
31	5.51	-	2.48	-	3.16	-	2.91	1.28	-	4.23	-	3.47

Table IVb Rainfall totals in inches, divided by 35, thus giving 35-year means ranging from 'trace' to .70 in., for use with table IVa.

Totals in inches x	35 yr means $x/_{35}$	Totals in inches x	35 yr means $x/_{35}$
– .17	'trace'	12.43 – 12.77	.36
.18 – .52	.01	12.78 – 13.12	.37
.53 – .87	.02	13.13 – 13.47	.38
.88 – 1.22	.03	13.48 – 13.82	.39
1.23 – 1.57	.04	13.83 – 14.17	.40
1.58 – 1.92	.05	14.18 – 14.52	.41
1.93 – 2.27	.06	14.53 – 14.87	.42
2.28 – 2.62	.07	14.88 – 15.22	.43
2.63 – 2.97	.08	15.23 – 15.57	.44
2.98 – 3.32	.09	15.58 – 15.92	.45
3.33 – 3.67	.10	15.93 – 16.27	.46
3.68 – 4.02	.11	16.28 – 16.62	.47
4.03 – 4.37	.12	16.63 – 16.97	.48
4.38 – 4.72	.13	16.98 – 17.32	.49
4.73 – 5.07	.14	17.33 – 17.67	.50
5.08 – 5.42	.15	17.68 – 18.02	.51
5.43 – 5.77	.16	18.03 – 18.37	.52
5.78 – 6.12	.17	18.38 – 18.72	.53
6.13 – 6.47	.18	18.73 – 19.07	.54
6.48 – 6.82	.19	19.08 – 19.42	.55
6.83 – 7.17	.20	19.43 – 19.77	.56
7.18 – 7.52	.21	19.78 – 20.12	.57
7.53 – 7.87	.22	20.13 – 20.47	.58
7.88 – 8.22	.23	20.48 – 20.82	.59
8.23 – 8.57	.24	20.83 – 21.17	.60
8.58 – 8.92	.25	21.18 – 21.52	.61
8.93 – 9.27	.26	21.53 – 21.87	.62
9.28 – 9.62	.27	21.88 – 22.22	.63
9.63 – 9.97	.28	22.23 – 22.57	.64
9.98 – 10.32	.29	22.58 – 22.92	.65
10.33 – 10.67	.30	22.93 – 23.27	.66
10.68 – 11.02	.31	23.28 – 23.62	.67
11.03 – 11.37	.32	23.63 – 23.97	.68
11.38 – 11.72	.33	23.98 – 24.32	.69
11.73 – 12.07	.34	24.33 – 24.67	.70
12.08 – 12.42	.35		

TABLE V. Accumulated Frequencies of Daily Rainfall Amounts, (in inches), 1916-1950.

Lake Vyrnwy

Daily Totals	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	All months
≥ 3.70							1						1
3.60		1					1						2
3.30		1					1			1			2
3.00		1					1			1	1		3
2.80	1	1					1			1	2		5
2.70	1	1					1			2	3		7
2.60	1	3					1			2	3		10
2.50	2	3		1			1			2	4		13
2.40	2	4		1		1	1			2	5	1	17
2.30	3	4		1		1	1			2	6	1	19
2.20	4	7		1		2	1		1	2	8	2	28
2.10	5	7		1		2	1		1	2	9	2	30
2.00	6	7		1		2	2		2	3	9	3	35
1.90	8	8		1		2	2		2	6	10	4	43
1.80	10	8		1		2	2		2	7	10	5	47
1.70	12	10		1		2	3	1	2	12	12	7	62
1.60	16	14		1		3	3	2	3	16	14	9	81
1.50	16	15	2	2	1	4	4	2	6	18	18	10	98
1.40	20	18	2	3	3	5	5	3	7	19	20	13	118
1.30	27	23	4	3	4	5	6	8	11	25	23	15	154
1.20	34	29	6	4	6	7	12	16	16	34	26	20	210
1.10	41	36	10	5	10	8	17	20	21	45	31	29	273
1.00	54	36	18	13	16	16	19	22	25	60	48	41	368
0.90	76	47	21	16	18	20	25	31	31	73	65	51	474
0.80	93	60	25	22	27	28	36	43	46	89	83	65	614
0.70	133	75	34	32	38	34	43	57	56	116	109	92	819
0.60	165	94	51	49	57	54	61	80	88	140	127	119	1085
0.50	205	125	78	78	74	72	91	111	116	179	163	162	1384
0.40	258	165	110	116	109	118	121	157	151	227	209	218	1959
0.30	328	222	169	174	152	147	182	208	206	279	267	298	2632
0.20	417	299	250	252	219	213	259	297	274	367	361	404	3612
0.12	525	388	368	372	329	308	373	404	384	467	395	504	4817
≥ 0.005	694	532	512	535	508	472	572	589	568	647	651	686	6966
* ≤0.004	391	457	573	515	577	578	513	496	482	438	399	399	5818
Total No: of days	1085	989	1085	1050	1085	1050	1085	1085	1050	1085	1050	1085	12784

*Including rainless days.

Fig. 1. AVERAGE MONTHLY RAINFALL AS A PERCENTAGE OF AVERAGE ANNUAL RAINFALL (1916 - 1950)

Fig. 1. AVERAGE MONTHLY RAINFALL AS A PERCENTAGE OF AVERAGE ANNUAL RAINFALL (1916–1950)

TABLE V. Accumulated Frequencies of Daily Rainfall Amounts, (in inches), 1916-1950.

Grantsfield

Daily Totals	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	All months
3.40					1								1
2.50					1		1						2
2.40					1		1						2
2.30					1		1			1			3
2.20					1		1			1			3
2.10					1		2			1			4
2.00					1		2			1			4
1.90					2		2			1			5
1.80					2		2			1			5
1.70					2		2	1		2			7
1.60					2		2	2		2			8
1.50					2		3	2		3			10
1.40					2		5	2		3		1	13
1.30					2		5	3		3		1	14
1.20	2				3	1	5	4	1	3	2	1	22
1.10	2				3	2	6	5	3	3	3	2	29
1.00	5		1		4	3	7	5	5	3	8	2	43
0.90	7	2	1		6	4	9	10	8	6	11	3	67
0.80	7	5	3	1	10	7	11	14	11	13	16	5	103
0.70	13	12	4	5	16	13	14	17	14	21	17	11	157
0.60	23	15	10	16	20	19	23	28	24	28	27	18	251
0.50	37	21	12	27	34	26	33	48	33	43	45	24	383
0.40	58	41	25	46	55	31	59	72	49	67	71	47	621
0.30	101	64	56	71	83	58	93	95	74	101	110	87	998
0.20	170	124	122	122	149	97	146	150	134	164	177	158	1713
0.10	193	208	214	227	248	188	148	243	244	280	277	296	2766
0.005	638	460	469	474	492	405	471	493	483	582	602	626	6195
* ≤0.004	447	529	616	576	593	645	614	592	567	503	448	459	6589
Total No: of days.	1085	989	1085	1050	1085	1050	1085	1085	1050	1085	1050	1085	12784

* Including rainless days.

TABLE V. Accumulated Frequencies of Daily Rainfall Amounts,
(in inches), 1916–1950

Cheltenham, Sandford Mead

Daily Totals	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	All months
IV 3.20						1							1
2.50						1							1
2.40						1							1
2.30						1							1
2.20						1							1
2.10						1							1
2.00					1	1				1			3
1.90					1	1				1			3
1.80					1	2	1			1			5
1.70					1	2	1			1	1		6
1.60					2	2	2	1		1	2		10
1.50					2	2	4	1		3	2		14
1.40		1			3	3	4	1		3	2		17
1.30	1	2			3	3	5	1	2	4	2		23
1.20	1	2	1		3	4	5	1	4	5	3	1	30
1.10	2	2	1		4	5	5	4	5	6	3	1	38
1.00	3	2	1		4	5	6	8	8	8	4	5	54
0.90	5	3	2		6	5	7	9	12	9	9	8	75
0.80	9	7	5		7	5	9	16	13	11	12	9	103
0.70	12	13	5	6	11	6	13	21	19	16	20	15	157
0.60	24	20	9	14	18	12	21	25	27	31	34	22	257
0.50	35	31	16	21	33	19	36	33	43	48	40	32	387
0.40	58	41	36	41	45	35	59	49	52	72	75	54	617
0.30	92	66	56	65	77	56	84	86	82	106	111	82	963
0.20	146	118	105	133	129	105	146	143	134	176	182	152	1669
0.10	273	210	193	242	228	190	244	241	225	271	286	268	2871
IV 0.005	573	442	435	466	443	387	447	456	456	521	541	551	5718
*≤0.004	512	547	650	584	642	663	638	629	594	564	509	534	7066
Total No: of days	1035	939	1085	1050	1085	1050	1085	1085	1050	1085	1050	1085	12784

*Including rainless days.

TABLE V Contd. Accumulated Frequencies of Daily Rainfall Amounts (in inches) 1916–1950

Birmingham, Edgbaston

Daily Totals	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	All months
≥ 2.5													
2.4													
2.3													
2.2								1					1
2.1								1					1
2.0								1					1
1.9								1					1
1.8								1				1	2
1.7								1				1	2
1.6							1	1		2		1	5
1.5					1		2	1	1	2		1	8
1.4					1		5	2	1	3	2	1	15
1.3					2		8	4	3	3	2	1	23
1.2	3			1	2		8	4	3	3	3	1	28
1.1	3			1	4	1	10	7	5	4	4	1	40
1.0	7	1	1	1	7	3	12	8	5	7	4	2	58
0.9	8	2	1	2	8	5	13	12	8	10	7	3	79
0.8	11	3	2	6	9	8	17	15	10	22	11	3	117
0.7	12	6	4	10	12	10	22	19	12	24	16	7	154
0.6	20	15	10	13	24	12	28	30	24	35	18	12	241
0.5	38	21	16	20	37	15	39	39	35	45	32	24	361
0.4	64	42	30	35	67	35	63	66	56	72	54	53	637
0.3	96	65	56	58	93	54	92	89	82	81	84	86	936
0.2	168	135	106	134	149	110	161	155	117	149	190	171	1745
0.1	273	220	174	219	217	173	239	228	208	234	266	262	2713
≥ 0.005	674	532	514	550	518	469	544	539	535	597	626	633	6731
≥ * 0.004	411	457	571	500	567	581	541	546	515	488	424	452	6053
Total No: of days	1085	989	1085	1050	1085	1050	1085	1085	1050	1085	1050	1085	12784

* Including rainless days.

TABLE VI Maximum and Minimum Monthly and Annual Totals of Rainfall, (in inches), 1916-1950, with supplementary list covering extremes for the 50-year period, 1911-1960.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Year.
Lake Vyrnwy 1916-50	Max	1948 18.34	1950 13.13	1947 11.85	1920 8.64	1924 8.14	1927 7.25	1939 10.46	1917 9.79	1918 13.88	1938 14.27	1929 15.13	1929 15.48	1928 81.84
	Min	1917 1929 2.42	1932 0.18	1944 1.07	1938 0.30	1935 1.11	1925 0.00	1919 1.12	1947 0.64	1929 0.96	1947 1.59	1945 0.40	1926 1.03	1933 40.81
1911-60	Max													
	Min	1953 1.77						1913 0.55		1959 0.39				
Grantsfield 1916-50	Max	1943 5.43	1923 6.50	1947 5.63	1920 4.72	1924 6.58	1931 3.83	1936 5.16	1946 6.20	1918 6.83	1933 6.15	1929 7.55	1929 6.23	1924 38.32
	Min	1950 0.59	1932 0.13	1938 0.13	1938 0.17	1919 0.45	1925 0.03	1921 0.61	1940 0.17	1940 0.62	1947 0.56	1933 0.62	1933 0.48	1921 19.02
1911-60	Max						1955 5.02			1957 8.54	1960 6.84		1959 6.66	1960 42.01
	Min									1959 0.25				
Cheltenham 1916-50	Max	1939 5.18	1950 5.99	1947 5.22	1935 4.30	1924 7.46	1931 4.55	1939 5.11	1946 5.42	1918 5.40	1949 5.98	1929 8.17	1929 7.66	1924 39.19
	Min	1921 1950 0.27	1932 0.23	1929 0.06	1938 0.14	1944 0.58	1928 0.08	1921 0.26	1940 0.09	1929 0.25	1947 0.26	1945 0.40	1933 0.44	1921 16.26
1911-60	Max						1912 5.62		1912 7.17					
	Min		1959 0.14		1912 0.06									
Birmingham 1916-50	Max	1939 5.81	1923 5.88	1947 6.79	1940 4.80	1942 6.81	1927 4.15	1936 6.59	1917 1946 5.66	1918 6.51	1949 5.42	1929 7.12	1929 5.34	1927 35.71
	Min	1950 0.74	1921 0.17	1929 0.16	1938 0.10	1928 0.46	1942 0.17	1935 0.40	1940 0.22	1928 0.65	1947 0.40	1920 0.69	1926 0.41	1921 17.93
1911-60	Max	1960 6.02					1912 4.91		1912 6.81		1960 5.89	1951 7.82		1960 40.93
	Min							1911 0.27		1959 0.17				

TABLE VII Maximum Daily Rainfall, (in inches), 1916-1950, with additional maxima for the 50-year period, 1911-1960.

		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
Lake Vyrnwy													
1916-50		1948	1946	1947	1945	1943	1943	1926	1931	1950	1938	1931	1929
	Max	2.89	3.60	1.53	2.54	1.58	2.40	3.70	1.70	2.23	3.31	3.00	2.41
1911-60										1958			1960
	Max									2.54			3.37
Grantsfield*													
1916-50		1924	1925	1919	1930	1924	1950	1934	1945	1949	1933	1940	1922
	Max	1.23	0.97	1.07	0.85	3.40	1.20	2.52	1.79	1.23	2.34	1.22	1.49
1911-60			1960		1959		1955			1958			
	Max		1.17		1.20		1.83			1.97			
Cheltenham													
1916-50		1918	1950	1916	1935	1924	1930	1937	1916	1918	1929	1950	1935
	Max	1.30	1.45	1.21	0.79	2.09	3.29	1.84	1.69	1.39	2.04	1.73	1.28
1911-60		1959							1915				
	Max	1.32							2.31				
Birmingham													
1916-50		1923	1950	1919	1940	1924	1931	1925	1922	1925	1929	1940	1948
	Max	1.29	1.02	1.00	1.24	1.51	1.10	1.66	2.20	1.58	1.64	1.48	1.86
1911-60		1960		1953	1959		1958	1915					
	Max	1.67		1.35	1.48		1.28	1.85					

*Based on 48 years only (1913-1960)

Appendix I

Intense falls of Rain in 2 hours or less 1860-1960
Extracted from British Rainfall

Arranged in Chronological order under County headings

Year	Class	Station	Riv. Div.	Date	Amt. in.	D'r'n min.	Rate in/hr.
		Gloucestershire					
1872	N	Berkley, Salter St.	3	July 6	1.77	120	.89
1878	N	Cheltenham	3	Aug. 10	1.18	55	1.29
1887	N	Tewkesbury, Beckford	3	Aug. 17	1.28	75	1.02
1895	N	Wickwar Rectory	3	June 26	1.71	120	.85
1897	R	Stroud, Stanley Pk.	3	July 20	2.00	60	2.00
1897	R	Stroud, Upfield	3	July 20	1.62	60	1.62
1899	R	Gloucester, Hempsted	3	Aug. 6	1.43	30	2.86
1900	N	Gloucester, Cotswold San.	3	June 12	1.12	40	1.68
1901	R	Dursley, Farnley	3	July 28	1.50	60	1.50
1907	R	Stonehouse, Wycliffe Coll.	3	July 22	1.50	45	2.00
1907	N	Stroud, Upfield	3	July 22	1.00	60	1.00
1907	N	Stroud, Upfield	3	July 22	1.16	90	.77
1911	N	Mickleton, Bank Ho.	4	Aug. 30	.88	15	3.52
1911	N	Mickleton, Bank Ho.	4	Aug. 30	1.02	30	2.04
1911	N	Whitminster	3	Oct. 13	1.20	60	1.20
1913	R	Blockley, Upton Wold	4	Oct. 2	2.00	120	1.00
1924	N	Nailsworth, Three Corners	3	May 29	.62	12	3.10
1924	N	Mickledon, Bank Ho.	4	July 21	1.00	45	1.33
1924	N	Cheltenham, High St.	3	May 19	1.37	60	1.37
1931	N	Blockley	4	June 14	1.16	45	1.55
1934	N	Stonehouse, Wycliffe Coll.	3	July 13	1.50	120	.75
1937	R	Tewkesbury, Forthampton Ct.	2	July 15	1.64	45	2.19
1937	R	Bromsberrow Heath P.S.	2	July 15	1.90	90	1.27
1938	N	Broadway, Buckland Manor	4	Aug. 6	1.77	120	.89
1938	R	Chipping Campden, Leysbourne	4	July 20	2.00	120	1.00
1942	N	Harescombe Grange	3	Aug. 29	1.55	120	.77
1942	N	Forest of Dean, Parkend	2	Aug. 29	1.45	120	.74
1947	R	Tewkesbury Pump. Stn.	3	July 14	1.88	45	2.51
1947	N	Tewkesbury, Forthampton Ct.	3	July 14	1.48	70	1.27
1953	N	Stroud, Ruscombe	3	June 25	1.54	79	1.17
1955	R	Broomsberrow Heath P. Stn.	2	July 13	1.98	75	1.58
1956	N	Upper Cam, Lansdown	3	July 11	.78	30	1.56
1956	N	Wotton-under-Edge, Bournstream	3	Aug. 30	1.25	60	1.25
1957	N	Tytherington, Keven	3	Aug. 12	.95	50	1.14
1958	N	" "	3	July 3	.95	39	1.46
1958	N	Stonehouse, Wycliffe Coll.	3	Aug. 19	1.25	90	.83
1958	N	" " "	3	Aug. 22	1.22	75	.98
1958	N	Chalford Hill	3	Sep. 5	.50	30	1.00
1959	N	Gloucester, Hempsted	3	Aug. 10	1.30	65	1.20
1959	N	Michinhampton, Rectory Cott.	3	June 25	1.30	90	.87
1959	N	Stonehouse, Wycliffe Coll.	3	July 20	1.17	30	2.34
		Worcestershire					
1866	N	Tenbury, Orleton	1	May 31	1.00	60	1.00
1867	R	Broomsgrove	2	Sep. 3	1.65	30	3.30
1868	R	"	2	Aug. 11	.97	12	4.85
1873	N	Tenbury, Orleton	1	Aug. 24	1.40	120	.70
1882	N	Stoke Bliss	1	May 3	.86	27	1.91
1884	N	Redditch, Prospect Hill	3	June 13	.77	12	3.85
1888	R	Worcester, Hawford Lodge	2	Aug. 28	1.76	105	1.01
1893	N	Redditch, Prospect Hill	3	July 12	.70	12	3.50
1895	VR	Worcester, Diglis Lock	1	June 26	2.75	60	2.75
1895	R	Worcester, Belmont Rd.	2	June 26	2.26	90	1.51
1897	N	Redditch, Prospect Hill	3	Aug. 7	1.09	35	1.87
1899	N	Tenbury, Rochford	1	June 28	1.17	55	1.28

Year	Class	Station	Riv. Div.	Date	Amt. in.	D'r'n min.	Rate in/hr.
		Worcestershire contd.					
1903	R	Earls Groome, Levant Lo.	2	July 18	1.71	60	1.71
1903	N	Tenbury, Rochford	1	July 18	1.15	60	1.15
1903	N	Worcester, Diglis Lock	1	May 28	1.80	105	1.03
1904	N	Bromsgrove, Barnt Green	2	July 25	.81	25	1.94
1904	R	" " "	2	July 25	2.50	120	1.25
1907	R	Tenbury, Rochford	1	July 21	1.61	30	3.22
1908	R	Martley	1	June 2	1.45	20	4.35
1909	N	Droitwich	2	Oct. 13	.80	30	1.60
1912	N	Redditch	3	Aug. 4	1.00	20	3.00
1915	N	Tenbury	1	Aug. 13	.63	15	2.52
1917	R	Droitwich, Friar St. Depot	2	June 17	1.62	60	1.62
1917	N	Tenbury, St. Michael's	1	June 17	1.16	60	1.16
1932	VR	Malvern, Free Library	1	Aug. 20	1.86	20	5.58
1932	N	Malvern British Camp Res.	1	Aug. 20	1.23	60	1.23
1933	N	Malvern Free Library	1	June 26	1.01	20	3.03
1933	R	Malvern Barnard's Green	1	June 26	1.25	30	2.50
1933	N	Pershore, Southern Ho.	3	June 26	.77	30	1.54
1933	N	Malvern, British Camp Res.	1	Apr. 29	.81	35	1.39
1937	N	Evesham, Bengeworth	3	July 15	1.10	60	1.10
1937	N	Broadway, Farncombe	3	July 15	1.00	60	1.00
1937	N	Evesham, High St.	3	July 15	1.43	108	.79
1938	N	Wolverley, Hill Ho.	2	July 1	1.00	60	1.00
1941	R	Stourport, Dunley Hill	1	July 13	2.04	60	2.04
1941	R	Droitwich Sew. Wks.	2	July 12	1.97	60	1.97
1947	R	Pedmore, Beckman Rd.	2	July 19	1.65	60	1.65
1949	N	Kempsey	2	July 15	1.00	30	2.00
1949	R	Worcester, Diglis Lock	1	July 16	1.39	36	2.32
1949	R	Tenbury, Belle Vue	1	Sep. 22	1.50	60	1.50
1950	R	Dudley, Bluecoat Sen. Sch.	2	June 7	1.75	46	2.28
1952	N	Tenbury, Belle Vue	1	Aug. 15	1.00	60	1.00
1952	N	Worcester W.W.	2	Aug. 6	1.16	45	1.55
1953	N	Pershore, Wick	3	July 18	1.26	45	1.68
1953	N	Kidderminster Pump. Sta.	2	June 26	.98	45	1.31
1954	N	Defford A/fd.	3	May 13	.79	24	1.97
1955	N	Malvern, British Camp. Res.	1	July 13	1.20	60	1.20
1955	N	Tenbury Wells, Belle Vue	1	July 17	1.08	80	.81
1956	N	Halesowen, Hayley Green	2	July 27	1.27	70	1.09
1957	R	Evesham, High St.	3	July 4	1.27	28	2.72
1957	R	Evesham, Bengeworth	3	July 4	1.19	30	2.38
1957	N	Halesowen, Hayley Green	2	July 19	.80	25	1.92
1957	N	Worcester, Redhill	2	Aug. 12	1.50	90	1.00
1958	N	Alcester, Cockhill	3	July 15	1.00	30	2.00
1958	N	Halesowen, Furnace Hill	2	Sep. 6	1.35	60	1.35
		Warwickshire					
1871	R	Alcester, Sambourn	1	Aug. 13	1.81	70	1.55
1880	R	Southam, Stockton	1	July 13	1.72	90	1.15
1889	VR	Henley-in-Arden, Barrells	1	July 13	3.64	65	3.36
1912	N	Radford Ho.	1	July 23	1.30	55	1.42
1915	N	Stratford-on-Avon, Avonfield	1	May 7	1.25	75	1.00
1918	N	Coventry, Keresley Grange	1	July 20	1.15	60	1.15
1926	N	Long Compton, Weston Pk.	1	May 21	.87	30	1.74
1930	N	Bidford, Moor Hall	1	June 13	.50	7	4.29
1932	R	Ryton-on-Dunsmore	1	July 12	2.36	90	1.57
1932	N	Coventry, Stoke	1	July 13	.94	45	1.25
1934	VR	Stratford-on-Avon	1	July 18	2.25	25	5.40
1934	R	Stratford-on-Avon, Thurlaston	1	July 18	2.03	45	2.71
1934	VR	Rugby, Bilton Grange	1	July 18	2.95	70	2.53
1934	VR	Dunchurch Hall	1	July 18	2.92	105	1.67

Year	Class	Station	Riv. Div.	Date	Amt. in.	D'r'n min.	Rate in/hr.
		Warwickshire contd.					
1935	N	Dunchurch Hall	1	June 25	1.50	100	.90
1937	R	Bedford, Moor Hall	1	July 15	2.00	75	1.60
1940	R	Alcester, Arrowside	1	Apr. 27	1.93	90	1.29
1941	N	Astley Vicarage	1	July 13	1.31	45	1.75
1941	N	Stratford-on-Avon, Thurlaston	1	July 13	.92	45	1.23
1941	N	Nuneaton, Bedworth W.W.	1	July 13	1.15	80	.86
1943	N	Rugby, Bilton Grange	1	June 11	1.68	120	.84
1948	N	Kenilworth, Honiley	1	Aug. 11	.92	40	1.38
1957	N	Alcester, The Pleck	1	Aug. 11	1.52	90	1.01
1958	N	" " "	1	July 15	1.22	90	.81
		Oxfordshire					
1935	R	Sibford Ferris, Woolman Cott.	1	Sep. 22	1.18	25	2.83
1948	N	Sibford Ferris, West View	1	Dec. 13	.75	20	2.25
		Herefordshire					
1875	R	Much Marcle, Caerswall	2	July 21	.90	9	6.00
1923	R	Ledbury, Underdown	2	July 13	1.52	45	2.03
1931	N	Colwall, The Downs	2	June 14	1.30	100	.78
1935	N	" " "	2	June 25	.93	48	1.16
1954	N	Downtown Castle, Estate Office	2	Aug. 21	.95	25	2.28
		Shropshire					
1870	R	Ludlow	3	July 9	2.15	105	1.23
1876	VR	Wenlock, Staunton Long Vicarage	3	July 16	2.65	105	1.51
1879	N	Bishops Castle	3	June 11	1.10	25	2.64
1881	N	" "	3	Aug. 16	1.20	90	.80
1898	N	Church Stretton, Wolstaston	3	May 23	1.38	80	1.03
1899	N	Oswestry, Mount Res.	4	June 29	1.40	90	.93
1899	N	Newport, Edgmont	4	June 28	1.50	120	.75
1904	N	Church Stretton, Wolstaston	3	July 25	1.26	60	1.26
1906	N	Ludlow, Ashford Ho.	3	Aug. 7	1.06	60	1.06
1913	N	Bishops Castle, Castle St.	3	May 26	.95	20	2.85
1914	N	Clun, Trinity Hospital	3	July 11	.64	11	3.49
1914	N	Church Stretton, Wolstaston	3	July 1	1.08	60	1.08
1914	VR	Bridgnorth, Coton Hall	4	July 1	3.10	120	1.55
1915	N	Clun	3	July 4	1.00	17	3.53
1924	N	Church Stretton, Wolstaston	3	May 31	1.29	115	.67
1924	R	Ludlow, Spring Field	3	May 31	2.59	120	1.29
1930	N	Bishops Castle, Castle Street	3	June 18	.86	23	2.24
1931	VR	Burwarton Hall	3	July 7	3.04	120	1.52
1931	N	Broomfield, Warwick Ho.	3	June 14	1.50	120	.75
1936	N	Shifnal, National Schools	4	June 21	1.25	60	1.25
1941	N	Meole Brace Hall	3	June 30	1.25	45	1.67
1942	N	Bridgnorth, Morville Hall	3	June 6	.87	30	1.74
1945	N	Craven Arms, Westhope Cott.	3	May 22	1.22	100	.73
1947	N	Shrewsbury, Longden Rd.	3	June 28	.69	20	2.07
1957	R	Newport, Harper Adams Coll.	4	July 6	1.50	60	1.50
1958	N	Anchor, Kerry Forest	3	Sep. 3	1.13	90	.75
1958	N	Oswestry Ilwyn Terrace	4	Aug. 10	.99	51	1.16
1958	N	Shrewsbury, Bicton Heath	3	July 3	1.49	45	1.99
1958	N	Newport, Chetwynd Park	4	Aug. 10	1.96	120	.98
1960	R	Shrewsbury, Monkmoor	3	Aug. 7	2.85	50	3.42
		Staffordshire					
1869	N	Wolverhampton	2	May 25	1.50	120	.75
1872	N	Wolverhampton, Waterloo Rd.	2	July 25	1.37	60	1.37
1875	N	"	2	July 20	1.40	30	2.80
1907	N	Norbury	2	July 22	1.65	120	.83
1927	VR	Kinver, Prestwood	2	July 11	2.94	100	1.76
1949	N	Shifnal, Weston Park	2	Oct. 25	.80	30	1.60

Year	Class	Station	Riv. Div.	Date	Amt. in.	D'r'n min.	Rate in/hr.
		Shropshire cont.					
1957	VR	Maer Hall Gardens	2	July 6	2.95	63	2.80
		Radnorshire					
1895	N	Kinghton, Ystrad Ho.	2	June 26	1.01	50	1.21
1895	R	" " "	2	June 26	2.38	110	1.30
		Montgomeryshire					
1895	VR	Churchstoke, Mellington Hall	4	June 26	4.80	120	2.40
1899	N	Welshpool, Pool Quay Vic.	5	July 7	.72	15	2.88
1908	VR	Newton, Greynog Ho.	5	June 3	2.89	120	1.45
1920	R	Llandysilio Rec.	5	May 29	1.02	15	4.08
1944	R	Montgomery, The Gaol	4	May 30	2.14	90	1.43
1956	R	Lake Vyrnwy, Expl. Stn.	5	June 11	1.62	80	1.21
1958	N	" " " "	5	Sep. 3	1.35	60	1.35
1958	N	Llansanffard, Pen-y-Tarn	5	June 1	.90	45	1.20
1959	R	Llanidloes, Belmont	4	June 25	2.25	120	1.13

Key:- N = Noteworthy
R = Remarkable
VR = Very Rare

Counties and river divisions in which falls were recorded

Gloucestershire	2. Severn, Right Banks Tribs. 3. Severn, Left Bank Tribs. 4. Severn-Upper Avon
Worcestershire	1. Severn, Right Bank Tribs. 2. Severn, Left Bank Tribs. 3. Severn-Upper Avon
Warwickshire	1. Severn-Upper Avon
Oxfordshire	1. Severn
Herefordshire	2. Severn
Shropshire	3. Severn, Right Bank Tribs. 4. Severn, Left Bank Tribs.
Staffordshire	2. Severn, Left Bank Tribs.
Radnorshire	2. Severn, Right Bank Tribs.
Montgomeryshire	4. Severn Right Bank Tribs. 5. Severn Left Bank Tribs.

Fig.2. AVERAGE ANNUAL RAINFALL 1916-50 (in inches) over the Severn River Board Area